Manufacture of Briquettes from Sugarcane Waste with Natural Dami Jackfruit Adhesive Siti Diah Ayu Febriani, S.Si., M.Si as chief counsellor.

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ABSTRACK

Energy needs and consumption in Indonesia are focused on the use of fuel oil, while its reserves are running low. On the other hand, there are a number of biomass that are quite abundant in quantity but have not been optimized for use. Sugarcane (Saccharum officinarum) is one of the plants that can grow in tropical Indonesia. Sugarcane is processed into sugar in sugar factories. After sugar cane is processed into sugar, it produces bagasse. A substitute for tapioca flour that can be used as a natural adhesive is jackfruit dami. The research method used is the experimental method and the physical characteristics of the briquettes. The results showed that bagasse briquettes using jackfruit dami adhesive were close to SNI and not close to commercial quality standards and British briquette quality standards. This composition has a calorific value of 4,483.25 cal/g, water content 5.07%, ash content 5.44%, density 0.77 g/cm³, and combustion rate of 0.081 g/s. This shows that the raw material for bagasse through the carbonization method can be used as a raw material in the manufacture of briquettes and dami jackfruit adhesive can be used as an adhesive with consideration of mixing adhesives or variations in the use of adhesives.

Kata Kunci: Biomass, Sugarcane Pulp, Dami Jackfruit, SNI Briket